

development process which are indeed capable of 'sustaining people and nature'. These two books provide valuable insights into both the general nature of such an alliance and its capacity to challenge conventional positions in specific case studies.

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**COPING WITH FLOODS** edited by G. Rossi, N. Harmancioglu and V. Yevjevich, NATO ASI Series, Kluwer Academic Publishers, Dordrecht, 1994. No. of pages: xiii + 776. Price: £193.00. ISBN 0-7923-2706-3.

This volume exists because of a perceived need to review two key developments in the flood mitigation field: firstly, the emergence of new technologies for real-time flood forecasting and warning, based mainly on the application of weather radar and satellite data; and secondly, the widespread shift from structural to non-structural measures, due mainly to a growing awareness of the adverse environmental effects of hydraulic works. In fact, these two themes, which are not particularly novel, occupy only a relatively small proportion of the book.

Over 50 contributors, almost exclusively from Europe and North America, have produced 40 chapters organized into six sections: historical overview, hydrologic characteristics, hydraulic characteristics, forecasting and warning, flood impacts, and flood mitigation measures. The most substantial sections are those dealing with the hydrological characteristics of floods, and the final section which appraises options for reducing flood losses. Although the total cover is wide, there are some surprises in the package. For example, despite a passing recognition of coastal flooding in Chapter One, only one contributor considers storm surge events, and there is

## REFERENCES

- Blaikie, P. 1985. *The Political Economy of Soil Erosion in Developing Countries*, Longman, London.  
Boserup, E. 1965. *The Conditions of Agricultural Growth: the Economics of Agrarian Change under Population Pressure*, Allen & Unwin, London.  
Ives, J. D. and Messerli, B. 1989. *The Himalayan Dilemma: Reconciling Development and Conservation*, Routledge, London.

very little on the environmental effects of control structures. The section on the impacts of floods is especially thin. There are chapters on economic and environmental assessments, plus one on the public response to flood warnings, curiously misplaced from the flood forecast and warning section, but nothing on the mortality or morbidity resulting from flooding.

Given the remarkable scarcity of authoritative books on river floods and their management, compared to what is available for other natural hazards, this compendium will find an immediate role as a reference source in any library able to afford the rather high cost. But it will be used to reinforce existing knowledge because the approach adopted is essentially traditional and technology-led. Some of the best contributions are on flood estimation routines and—ironically in view of the stated context of the book—on structural control measures. The major weakness is that the contributors consistently reflect their own experience in western, developed countries. Apart from some limited comments in one chapter, nowhere is there any acknowledgement that floods exert their greatest toll in the Third World and that the most appropriate coping strategies in such countries may well be different from those described in this book.

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**REMOTE SENSING OF SEA ICE AND ICEBERGS** edited by S. Haykin, E. O. Lewis, R. K. Raney and J. R. Rossiter, Wiley, Chichester, 1994. No. of pages: xxviii + 686. Price: £73.00. ISBN 0-471-55494-4.

Study of the earth's polar regions has, for a variety of reasons, developed dramatically over the last 25 years. The fact that these regions are remote from most human habitation, vast and inhospitable, implies that they are particularly well suited to airborne and spaceborne remote sensing methods. The fact that they are often in

darkness or covered by cloud has meant that those remote sensing techniques that use microwave radiation, either passively, by measuring thermally emitted radiation, or actively, using some type of radar, are especially important. As one would suspect, much of the recent technological development in these fields has occurred in Canada. This book presents a detailed description of recent developments, principally in Canada, in the remote sensing of sea ice and icebergs. It is mainly organized by techniques, but it will perhaps be useful for me to list here the main parameters that are discussed. These are the detection of ice floes and